AT160x SERIES

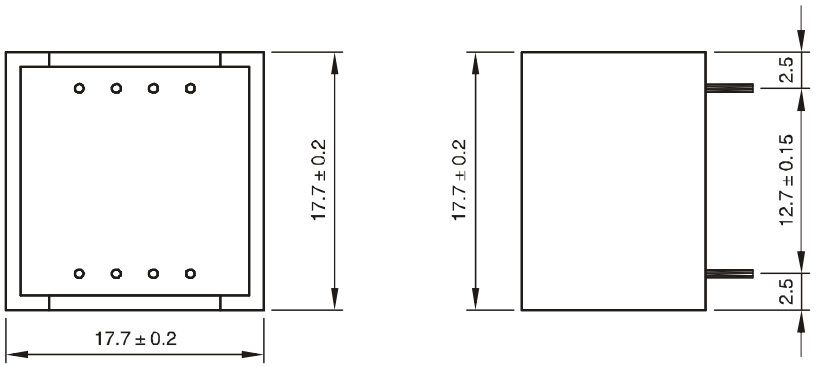
Through Hole Line Matching Transformer

FEATURES
- Fully encapsulated
- Low profile
- High dielectric strength
- Ten models available
- Ex stock
- Competitively priced
- Lead free

OPTIONS
- Tape and reel is standard (400 pcs. per reel)
- Bulk packaging available for Smaller quantities
- Custom design available
- Tolerance: 5% is standard, Tighter tolerance available

APPLICATIONS
- Line matching
- Modems
- Fax modems
- Laptop Computer
- Telecommunications
- Instrumentation
- PCMCIA

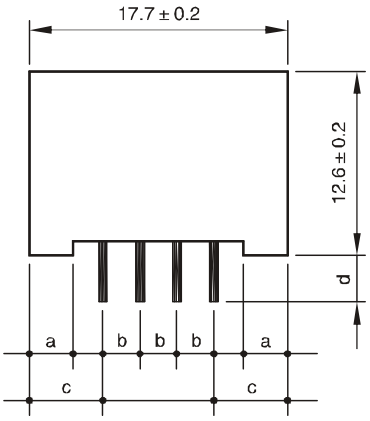
Parameters		Unit	Part Number									
			AT1601	**AT1602**	**AT1603**	**AT1604**	**AT1605**	**AT1601A**	**AT1602A**	**AT1603A**	**AT1604A**	**AT1605A**
Ref. Temp. Data		ºC	25	25	25	25	25	25	25	25	25	25
Impedance min. @ 1.0KHz	Primary	Ω	600	600	600	600 (150,150)	600 (150+150)	600	600	600	600 (150,150)	600 (150+150)
	Secondary	Ω	600	600 (150,150)	600 (150+150)	600 (150,150)	600 (150+150)	600	600 (150,150)	600 (150+150)	600 (150,150)	600 (150+150)
Imductance min. @ 0.2KHz	Primary	H	2.8	2.8	2.8	2.8 (0.7,0.7)	2.8 (0.7+0.7)	2.8	2.8	2.8	2.8 (0.7,0.7)	2.8 (0.7+0.7)
	Secondary	H	2.8	2.8 (0.7,0.7)	2.8 (0.7+0.7)	2.8 (0.7,0.7)	2.8 (0.7+0.7)	2.8	2.8 (0.7,0.7)	2.8 (0.7+0.7)	2.8 (0.7,0.7)	2.8 (0.7+0.7)
DC Resistance Typ. ±10%	Primary	Ω	66	66	66	66 (33,33)	66 (33+33)	90	90	90	90 (45,45)	90 (45+45)
	Secondary	Ω	66	66 (33,33)	66 (33+33)	66 (33,33)	66 (33+33)	90	90 (45,45)	90 (45+45)	90 (45,45)	90 (45+45)
Turns Ratio =< ±2%		-	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Winding Configurations		-	-	One Winding Centre Tapped	One Winding Split	Both Winding Centre Tapped	Both Winding Split	-	One Winding Centre Tapped	One Winding Split	Both Winding Centre Tapped	Both Winding Split
Insertion Loss @ 2.0KHz		dB	≤ 1.5					≤ 2.0				
Return Loss Transformer 0.2-4KHz In Networks		dB	≥10.0, ≥21.0					≥8.0, ≥20.0				
Shunt Loss (Typ.)		KΩ	9					9				
Frequency Response Typ. 0.2 - 3.5KHz		dB	- 0.3					- 0.5				
Wide Band Response 02 - 10KHz		dB	-2.5					-4.5				
Power Level		dBm	- 45.0 ~ +3.0					- 43.0 ~ +3.0				
Longitudinal Balance 0.3-4KHz		dB	- 80.0					- 70.0				
Distortion 0dB @1KHz		%	≤ 0.1					≤ 0.25				
Leakage Induction (Typ)		mH	14					14				
Dielectric Strenght (P/S)		kVDC	6.5					6.5				
Temp. Range	Operation	ºC	-10 ~ +60					-10 ~ +60				
	Storage	ºC	-20 ~ +70					-20 ~ +70				
Specification Met			BS 6240: Construction and Flammability UL94V-0					CCITT: Rec. T/CD 1-1				
			BS 6310: Isolation					(Sept. 1982)				
			BS 6305: Return Loss (1982/Paragraph 4.3.2.2/b)									

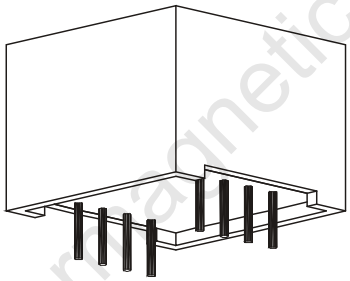


Note:
The AT1600 Series Line Matching Transformers meet the return loss specifications of BS 6305.

It is important, however, to use the circuit recommended by BS 6305 for return loss measurements.

The AT1600 Series meet EN41003.

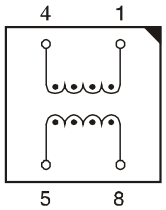




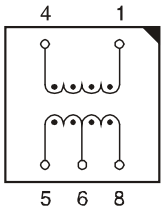
a=3.0
b=2.54
c=5.04
d=3.2 ± 0.8

Note: All Dimensions in mm

AT1601
AT1601A

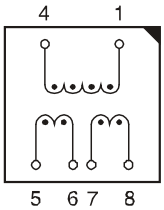


AT1602
AT1602A



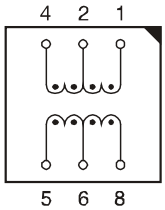
one–winding
centre–tapped

AT1603
AT1603A



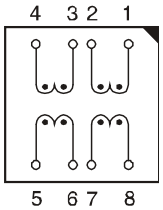
one–winding
split

AT1604
AT1604A



both–windings
centre–tapped

AT1605
AT1605A



both–windings
split

Due to the unique design and the most advanced manufacturing techniques the 2 coils are fully identical, meaning there is no real primary nor secondary winding. Depending on the application, the transformers can be used either way.